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# MEAN WELL

## SWITCHING POWER SUPPLY

### ISO-9001 CERTIFIED MANUFACTURER

# S-320

## SERIES

Jameco Part Number 216776  
(S-320-5)

- .LOW COST, HIGH RELIABILITY
- .COOLING FAN ON/OFF AUTOMATICALLY
- .INTERNATIONAL AC INPUT RANGE
- .HIGH EFFICIENCY, LOW WORKING TEMPERATURE
- .SOFT-START CIRCUIT, LIMITING AC SURGE CURRENT
- .SHORT CIRCUIT, OVERLOAD, OVER VOLTAGE, OVER TEMP PROTECTED
- .COMPACT SIZE, LIGHT WEIGHT
- .100% FULL LOAD BURN-IN TEST
- .BUILT IN EMI FILTER, LOW RIPPLE NOISE
- .105°C OUTPUT CAPACITOR



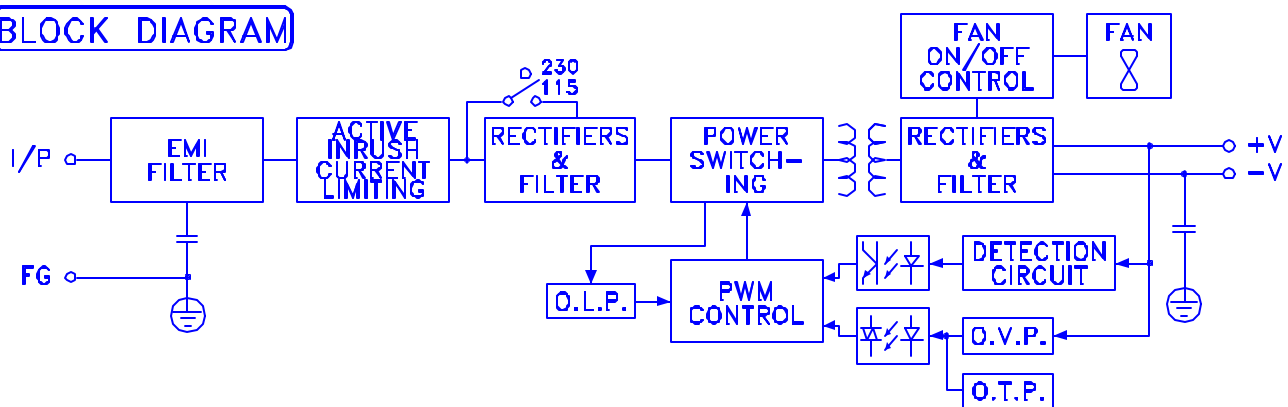
| MODEL                     | S-320-5                                                                                                                                 | S-320-7.5 | S-320-12   | S-320-13.5 | S-320-15 | S-320-24   | S-320-27   | S-320-48   |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|-----------|------------|------------|----------|------------|------------|------------|
| SPECIFICATION             |                                                                                                                                         |           |            |            |          |            |            |            |
| DC OUTPUT VOLTAGE         | 5V                                                                                                                                      | 7.5V      | 12V        | 13.5V      | 15V      | 24V        | 27V        | 48V        |
| OUTPUT V. TOLERANCE       | ±2%                                                                                                                                     | ±2%       | ±1%        | ±1%        | ±1%      | ±1%        | ±1%        | ±1%        |
| OUTPUT RATED CURRENT      | 50A                                                                                                                                     | 36A       | 25A        | 22A        | 20A      | 12.5A      | 11A        | 6.5A       |
| OUTPUT CURRENT RANGE      | 0-50A                                                                                                                                   | 0-36A     | 0-25A      | 0-22A      | 0-20A    | 0-12.5A    | 0-11A      | 0-6.5A     |
| RIPPLE & NOISE            | 150mVp-p                                                                                                                                | 150mVp-p  | 150mVp-p   | 150mVp-p   | 150mVp-p | 150mVp-p   | 200mVp-p   | 240mVp-p   |
| LINE REGULATION           | ±0.5%                                                                                                                                   | ±0.5%     | ±0.5%      | ±0.5%      | ±0.5%    | ±0.5%      | ±0.5%      | ±0.5%      |
| LOAD REGULATION           | ±1%                                                                                                                                     | ±1%       | ±0.5%      | ±0.5%      | ±0.5%    | ±0.5%      | ±0.5%      | ±0.5%      |
| DC OUTPUT POWER           | 250W                                                                                                                                    | 270W      | 300W       | 297W       | 300W     | 300W       | 297W       | 312W       |
| EFFICIENCY                | 77%                                                                                                                                     | 80%       | 82%        | 83%        | 84%      | 86%        | 86%        | 87%        |
| DC VOLTAGE ADJ.           | 4.5-5.7V                                                                                                                                | 6-9V      | 10-13.2V   | 12-15V     | 13.5-18V | 20-26.4V   | 26-32V     | 41-56V     |
| INPUT VOLTAGE RANGE       | 88~132VAC / 176~264VAC BY SWITCH 47~63Hz; 248~370VDC                                                                                    |           |            |            |          |            |            |            |
| AC CURRENT                | 6A/115V 3.5A/230V                                                                                                                       |           |            |            |          |            |            |            |
| INRUSH CURRENT            | 20A/115V 40A/230V                                                                                                                       |           |            |            |          |            |            |            |
| LEAKAGE CURRENT           | <3.5mA/240VAC                                                                                                                           |           |            |            |          |            |            |            |
| OVERLOAD PROTECTION       | 105~135% TYPE:PULSING HICCUP SHUTDOWN RESET:AUTO RECOVERY                                                                               |           |            |            |          |            |            |            |
| OVER VOLTAGE PROTECTION   | 5.75-6.75V                                                                                                                              | 9.4-10.9V | 13.8-16.2V | 15.5-18.2V | 18-21V   | 27.6-32.4V | 33.7-39.2V | 57.6-67.2V |
| FAN CONTROL, O.T.P.       | RTH1>=65°C FAN ON, <=55°C FAN OFF, >=70°C OUTPUT SHUTDOWN (5~15V)<br>RTH1>=70°C FAN ON, <=65°C FAN OFF, >=80°C OUTPUT SHUTDOWN (24~48V) |           |            |            |          |            |            |            |
| TEMP. COEFFICIENT         | ±0.03% / °C (0~50°C)                                                                                                                    |           |            |            |          |            |            |            |
| SETUP, RISE, HOLD UP TIME | 2s, 20ms, 20ms                                                                                                                          |           |            |            |          |            |            |            |
| VIBRATION                 | 10~500Hz, 2G 10min./1cycle, PERIOD FOR 60min. EACH AXES                                                                                 |           |            |            |          |            |            |            |
| WITHSTAND VOLTAGE         | I/P-O/P:3KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC                                                                                             |           |            |            |          |            |            |            |
| ISOLATION RESISTANCE      | I/P-O/P, I/P-FG, O/P-FG:500VDC / 100M Ohms                                                                                              |           |            |            |          |            |            |            |
| WORKING TEMP., HUMIDITY   | -10°C~+60°C(REFER TO OUTPUT DERATING CURVE), 20%~90% RH                                                                                 |           |            |            |          |            |            |            |
| STORAGE TEMP., HUMIDITY   | -20°C~+85°C, 10%~95% RH                                                                                                                 |           |            |            |          |            |            |            |
| DIMENSION                 | 215*115*50mm CASE:912                                                                                                                   |           |            |            |          |            |            |            |
| WEIGHT                    | 1.15Kgs                                                                                                                                 |           |            |            |          |            |            |            |
| SAFETY STANDARDS          | UL1950 APPROVED                                                                                                                         |           |            |            |          |            |            |            |
| EMC STANDARDS             | -----                                                                                                                                   |           |            |            |          |            |            |            |

- NOTE :
- 1.ALL PARAMETERS ARE SPECIFIED AT 230VAC INPUT, RATED LOAD, 25°C 70% RH. AMBIENT.
  - 2.TOLERANCE GINCLUDE SET UP TOLERANCE, LINE REGULATION, LOAD REGULATION.
  - 3.RIPPLE & NOISE ARE MEASURED AT 20MHz BY USING A 12" TWISTED PAIR TERMINATED WITH A 0.1uF & 47uF CAPACITOR.
  - 4.LINE REGULATION IS MEASURED FROM LOW LINE TO HIGH LINE AT RATED LOAD.
  - 5.LOAD REGULATION IS MEASURED FROM 0% TO 100% RATED LOAD.
  - 6.C3,4,41 MUST BE REMOVED.

1999-07-28

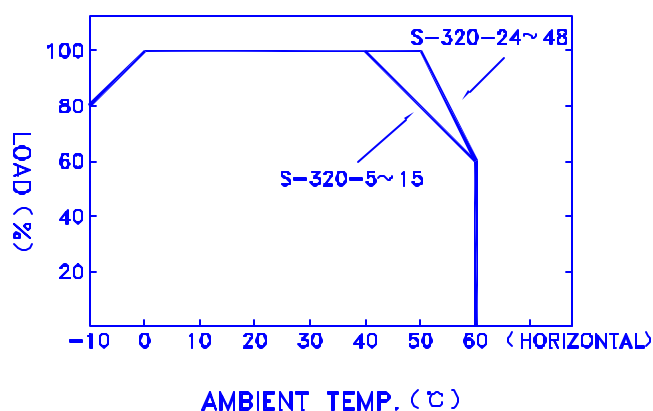
## S-320 SERIES

## BLOCK DIAGRAM

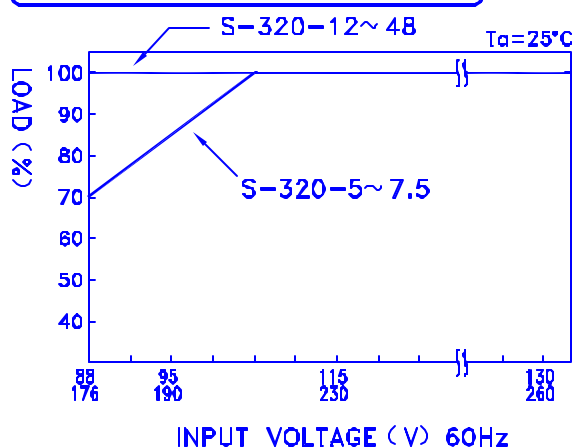


fosc: 90KHz

## OUTPUT DERATING



## STATIC CHARACTERISTICS



**DIMENSION (mm)**

- ❑ CASE : 912
- ❑ TERMINAL PIN NO. ASSIGNMENT
  - ❑ PIN 1,2 : AC INPUT
  - ❑ PIN 3 : FG  $\perp$
  - ❑ PIN 4,5,6: DC OUTPUT  $-V$
  - ❑ PIN 7,8,9: DC OUTPUT  $+V$

